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64

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INTELLIGENCE MEMORANDUM

QUARTERLY ESTIMATE OF THE PRODUCTION OF AIRCRAFT
IN THE SINO-SOVIET BLOC
APRIL-JUNE 1955

CIA/RR IM-414

3 October 1955

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FOREWORD

This publication is the first in a series to be issued on a quarterly basis summarizing production of aircraft in the Sino-Soviet Bloc. The estimates presented are intended to supersede those contained in previous CIA reports and are published to satisfy consumer requests for the most recent estimates of aircraft production in the Bloc. Both the methodology and the technical terms employed in previous reports have been utilized in the present report. Changes in the estimates have resulted from later information and analysis rather than from any methodological change. No interagency coordination has been attempted, and no dissemination of this memorandum outside of CIA is planned.

- 111 -

S-E-C-R-E-T

S-E-C-R-E-T

FOREWORD

This publication is the first in a series to be issued on a quarterly basis summarizing production of aircraft in the Sino-Soviet Bloc. The estimates presented are intended to supersede those contained in previous CIA reports and are published to satisfy consumer requests for the most recent estimates of aircraft production in the Bloc. Both the methodology and the technical terms employed in previous reports have been utilized in the present report. Changes in the estimates have resulted from later information and analysis rather than from any methodological change. No interagency coordination has been attempted, and no dissemination of this memorandum outside of CIA is planned.

- 111 -

S-E-C-R-E-T

CIA/RR IM-414
(ORR Project 33.934)

S-E-C-R-E-T

QUARTERLY ESTIMATE OF THE PRODUCTION OF AIRCRAFT
IN THE SINO-SOVIET BLOC*
APRIL-JUNE 1955

1. Production.

From the first to the second quarter of 1955 the production of aircraft in the Sino-Soviet Bloc declined about 3 percent, in numbers of aircraft produced.** The decline is principally in the output of fighter aircraft in the USSR, where the production of the Fresco (Mig-17) is being replaced by the production of later models. In contrast to the reduction in numbers, an increase of about 4 percent in total airframe weight produced was reached during the second quarter of 1955. This increase results from the trend toward greater weight in modern aircraft. A specific example of this trend in the current estimate is the conversion from the production of the Fresco at certain Soviet plants to that of later models which weigh 50 to 60 percent more than the Fresco.

The USSR produces most of the aircraft manufactured in the Sino-Soviet Bloc. Of the 2,434 aircraft produced during the second quarter of 1955, 2,121 aircraft, or about 87 percent, were produced in the USSR,*** and the remainder, 313 aircraft, were produced in the European Satellites.**** There is still no indication that Communist

* The estimates and conclusions contained in this memorandum represent the best judgment of ORR as of 15 September 1955.

** The estimated production of aircraft in the Sino-Soviet Bloc from 1953 to mid-1955, by number, is given in Table 1, p. 2, below, and in Table 2, p. 3, below, by airframe weight.

*** The production of aircraft in the USSR, from 1953 to mid-1955, by number, is given in Table 3, p. 5, below, and by airframe weight, in Table 4, p. 6, below.

**** The production of aircraft in the European Satellites from 1953 to mid-1955, by number, is given in Table 5, p. 7, below, and by airframe weight, in Table 6, p. 8, below.

S-E-C-R-E-T

S-E-C-R-E-T

China or the Asiatic Satellites are producing aircraft. On the basis of airframe weight, 94 percent of the production in the Sino-Soviet Bloc took place in the USSR. The difference between the Soviet share of the production on a weight basis as opposed to a unit basis is explained by the production of relatively lighter aircraft by the European Satellites.

Combat aircraft comprised about 57 percent of the total aircraft production, in units, during the second quarter of 1955. This proportion remains essentially unchanged from the first quarter of 1955.

Table 1

Estimated Production of Aircraft in the Sino-Soviet Bloc, by Number
1953 to Mid-1955

Type of Aircraft	Units			
	1953	1954	1955	
			1st Quarter	2d Quarter
Jet bombers				
Heavy	0	16	13	17
Medium	147	181	85	94
Light	1,384	1,276	321	321
Jet fighters	4,414	4,423	1,012	916
Ground attack	457	207	30	30
Transports	1,662	1,681	239	249
Trainers				
Jet	522	1,265	363	363
Piston	877	1,077	284	291
Others a/	728	794	170	153
Total	<u>10,191</u>	<u>10,920</u>	<u>2,517</u>	<u>2,434</u>

a. Helicopters, gliders, and seaplanes.

S-E-C-R-E-T

Table 2

Estimated Production of Aircraft in the Sino-Soviet Bloc, by Weight
1953 to Mid-1955

<u>Type of Aircraft</u>	<u>Thousand Pounds of Airframe Weight ^{a/}</u>			
	<u>1953</u>	<u>1954</u>	<u>1955</u>	
			<u>1st Quarter</u>	<u>2d Quarter</u>
Jet bombers				
Heavy	0	1,800	1,460	1,910
Medium	7,674	9,240	4,340	4,805
Light	25,410	23,360	5,840	5,840
Jet fighters	31,446	33,214	7,684	7,661
Ground attack	3,700	1,676	243	243
Transports	9,240	9,860	1,906	2,106
Trainers				
Jet	3,348	11,206	3,115	3,115
Piston	936	1,394	588	608
Others ^{b/}	7,012	8,669	1,800	1,664
Total	<u>88,766</u>	<u>100,419</u>	<u>26,976</u>	<u>27,952</u>

a. These figures include the production of spare parts.

b. Helicopters, gliders, and seaplanes.

- 3 -

S-E-C-R-E-T

S-E-C-R-E-T

The importance of the USSR as the primary producer again is emphasized by the fact that roughly 90 percent of the production of combat aircraft in the Sino-Soviet Bloc took place in the USSR.

2. New Types.

Present estimates have been revised considerably from those of previous CIA reports as a result of the new aircraft displayed by the USSR during recent public displays.* The Bison, a 4-jet heavy bomber, of which a total of 21 has been seen, is believed, on the basis of Bison flights from and Bisons seen on the factory airfield, to be in production at Factory No. 23 in Moscow. The two new fighter aircraft -- the Farmer, a Mig day-fighter, and the Flashlight, an all-weather interceptor -- are being phased into production at Soviet fighter plants which previously produced or currently produce the Fresco. Production of the new large helicopter, the Horse, is estimated to have begun at Factory No. 82 in Moscow, which formerly produced the Hound (Type 36), a smaller helicopter. Horses were recently sighted in the vicinity of Factory No. 82. The Camel, a twin-jet transport aircraft, is the most recent model displayed by the USSR. It is estimated that the Camel is still in the prototype stage because only one has been seen to date. Factory No. 84 in Tashkent, which has produced most of the large Soviet transport aircraft in the past, quite possibly will be the production site for the Camel. The new Bear, a 4-turboprop heavy bomber, currently is not considered to be in production. At least seven of these aircraft are known to be in existence from recent sightings, but there has been no firm indication that series production of the Bear is taking place at any of the Soviet plants.

* The rehearsals during April for the canceled airshow of 1 May 1955 and the actual Aviation Day Airshow of 3 July 1955.

- 4 -

S-E-C-R-E-T

S-E-C-R-E-T

Table 3

Estimated Production of Aircraft in the USSR, by Number
1953 to Mid-1955

<u>Type of Aircraft</u>	<u>Units</u>			
	<u>1953</u>	<u>1954</u>	<u>1955</u>	
			<u>1st Quarter</u>	<u>2d Quarter</u>
Jet bombers				
Heavy	0	16	13	17
Medium	147	181	85	94
Light	1,384	1,276	321	321
Jet fighters	4,119	3,964	897	798
Transports	1,662	1,681	239	249
Trainers				
Jet	522	1,176	294	294
Piston	684	828	207	207
Others <u>a/</u>	683	770	158	141
Total	<u>9,201</u>	<u>9,892</u>	<u>2,214</u>	<u>2,121</u>

a. Helicopters, gliders, and seaplanes.

- 5 -

S-E-C-R-E-T

S-E-C-R-E-T

Table 4

Estimated Production of Aircraft in the USSR, by Weight
1953 to Mid-1955

Type of Aircraft	Thousand Pounds of Airframe Weight ^{a/}			
	1953	1954	1955	
			1st Quarter	2d Quarter
Jet bombers				
Heavy	0	1,800	1,460	1,910
Medium	7,674	9,240	4,340	4,805
Light	25,410	23,360	5,840	5,840
Jet fighters	29,662	30,443	6,989	6,948
Transports	9,240	9,860	1,906	2,106
Trainers				
Jet	3,348	10,635	2,673	2,673
Piston	727	960	259	259
Others ^{b/}	6,957	8,652	1,786	1,650
Total	<u>83,018</u>	<u>94,950</u>	<u>25,253</u>	<u>26,191</u>

a. These figures include the production of spare parts.

b. Helicopters, gliders, and seaplanes.

S-E-C-R-E-T

S-E-C-R-E-T

Table 5

Estimated Production of Aircraft in the European Satellites, by Number
1953 to Mid-1955

		Units			
Country	Type of Aircraft	1953	1954	1955	
				1st Quarter	2d Quarter
Czechoslovakia	Jet fighter	294	394	69	69
	Ground attack	457	207	30	30
	Jet trainer	0	89	69	69
	Piston trainer	66	165	71	78
	Others	25	0	6	6
Total		<u>842</u>	<u>855</u>	<u>245</u>	<u>252</u>
Poland	Jet fighter	1	65	46	49
	Piston trainer	0	60	0	0
Total		<u>1</u>	<u>125</u>	<u>46</u>	<u>49</u>
Bulgaria	Piston trainer	<u>103</u>	<u>0</u>	<u>0</u>	<u>0</u>
Rumania	Piston trainer	<u>24</u>	<u>24</u>	<u>6</u>	<u>6</u>
Hungary	Others	<u>20</u>	<u>24</u>	<u>6</u>	<u>6</u>
Grand total		<u>990</u>	<u>1,028</u>	<u>303</u>	<u>313</u>

- 7 -

S-E-C-R-E-T

S-E-C-R-E-T

Table 6

Estimated Production of Aircraft in the European Satellites, by Weight
1953 to Mid-1955

		Thousand Pounds of Airframe Weight <u>a/</u>			
				1955	
Country	Type of Aircraft	1953	1954	1st Quarter	2d Quarter
Czechoslovakia	Jet fighter	1,775	2,380	417	417
	Ground attack	3,700	1,676	243	243
	Jet trainer	0	571	442	442
	Piston trainer	72	349	324	343
	Others	41	0	10	10
Total		<u>5,588</u>	<u>4,976</u>	<u>1,436</u>	<u>1,455</u>
Poland	Jet fighter	9	391	278	296
	Piston trainer	0	64	0	0
Total		<u>9</u>	<u>455</u>	<u>278</u>	<u>296</u>
Bulgaria	Piston trainer	<u>116</u>	<u>0</u>	<u>0</u>	<u>0</u>
Rumania	Piston trainer	<u>21</u>	<u>21</u>	<u>5</u>	<u>6</u>
Hungary	Others	<u>14</u>	<u>17</u>	<u>4</u>	<u>4</u>
Grand total		<u>5,748</u>	<u>5,469</u>	<u>1,723</u>	<u>1,761</u>

a. These figures include the production of spare parts.

- 8 -

S-E-C-R-E-T

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S-E-C-R-E-T

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